UNITED STATES
DEPARTMENT OF LABOR
MINE SAFETY AND HEALTH ADMINISTRATION
Metal and Nonmetal Mine Safety and Health

REPORT OF INVESTIGATION

Surface Nonmetal Mine
(Cement)

Fatal Powered Haulage Accident
May 28, 2012

Lehigh Northeast Cement Company
Glens Falls Plant
Glens Falls, Warren County, New York
I.D. No. 30-00585

Investigators

Gary Merwine
Mine Safety and Health Inspector

Terry Heim
Mine Safety and Health Inspector

Walter Morgan
Mine Safety and Health Specialist

Originating Office

Mine Safety and Health Administration
Northeast District
Thorn Hill Industrial Park
178 Thorn Hill Road, Suite 100
Warrendale, Pennsylvania 15086-7573
Donald J. Foster, Northeast District Manager
OVERVIEW

Michael T. Corbett, Shift Operator, age 51, was killed on May 28, 2012, when he was struck and run over by a front-end loader. Corbett was walking between the crane bay building No.19 and the No.1 finish mill when the accident occurred.

The accident occurred due to management’s failure to ensure the operator of the front-end loader maintained control of the loader at all times, specifically while making a left hand turn when the victim was walking nearby.
GENERAL INFORMATION

Glens Falls Plant, a cement plant owned and operated by Lehigh Northeast Cement Company, is located in Glens Falls, Warren County, New York. Christoph Striecher, Vice-President of Operations, and Stuart Guinther, Plant Manager, are the principal operating officials. The plant normally operates three 8-hour shifts per day, seven days a week. Total mine employment is 92 persons.

Limestone is drilled and blasted from multiple benches at a quarry adjacent to the plant. Haul trucks transport the broken stone to a primary crusher. Crushed stone is conveyed to the plant where it is mixed and processed with other materials to produce cement products. Finished products are sold in bulk and transported by truck and rail for use in the construction industry.

The Mine Safety and Health Administration (MSHA) completed its last regular inspection at this operation on March 1, 2012.

DESCRIPTION OF ACCIDENT

On the day of the accident, May 28, 2012, Michael T. Corbett (victim) reported to the mine at approximately 2:00 p.m., his usual starting time.

Prior to the accident, Corbett worked on the separator floor at the No.1 finish mill. About 7:30 p.m., Raymond VanEvery, Central Control Operator, contacted Corbett and told him to check on the reclaimer, located in mill building No.17. Corbett completed the task and informed VanEvery by radio that the task was completed. Corbett walked to the No.1 finish mill break-room and met Walter J. Winchell, Front-end Loader Operator. After lunch, Corbett told Winchell he was going to walk to the plant mill office building No.21 for a soft drink. Shortly after Corbett left the No.1 finish mill, VanEvery called Winchell to get a front-end loader to feed gypsum into the crane bay building No.19 hopper.

Winchell walked to the north side of the control room, drove the front-end loader into the west side entrance of the crane bay building No.19, and began to feed gypsum into the hopper. Winchell noticed the material starting to build up, indicating a blockage of material occurred or the vibrator stopped. Winchell backed the front-end loader approximately 38 yards out of the west side entrance of the crane bay building No.19 and traveled southeast in a forward direction toward the No.1 finish mill.

Corbett left the plant mill office building and walked in a southeast direction toward the No.1 finish mill. When Corbett walked past the southwest corner of the crane bay building No.19, Winchell turned the front-end loader in a northwest direction, while looking over his right shoulder in a southeast direction, striking Corbett. Winchell backed the front-end loader in an east direction enabling him to look into the observation window for the No. 2011 belt conveyor to determine if the material was blocked. Winchell observed the No. 2011 belt conveyor empty and heard the vibrator operating, confirming the material to be blocked.

Winchell parked the front-end loader and in about 10 minutes, unblocked the material. He went to the front-end loader, saw something lying on the ground in front of him, drove the front-end loader forward, and found Corbett lying motionless on the ground.
At approximately 8:30 p.m., Winchell called VanEvery on the radio to report finding Corbett. Myron A. Story, Shift Supervisor, heard the radio communication and went to the scene. Story found Corbett nonresponsive, instructed VanEvery to call for Emergency Medical Services (EMS), and started cardiopulmonary resuscitation (CPR). EMS arrived and transported the victim to Glens Falls Hospital.

At 9:50 p.m., Dr. Michael Sikirica, Warren County, New York Medical Examiner, pronounced Corbett dead resulting from blunt force trauma.

**INVESTIGATION OF ACCIDENT**

MSHA received notification of the accident at 9:50 p.m. on May 28, 2012, by a telephone call to MSHA’s National Call Center from Alan Washburn, Safety Manager for Lehigh Northeast Cement Company. The National Call Center notified Kevin H. Abel, Assistant District Manager, and an investigation started the same day. In order to ensure the safety of all persons, MSHA issued an oral order pursuant to 103(j) of the Mine Act. Upon arrival of the first Authorized Representative at the mine site, MSHA modified the order to section 103(k) of the Mine Act. A citation was issued under the provisions of 104(a) of the Mine Act for a violation of 30 CFR 50.10(a) for the untimely reporting of the accident.

MSHA’s accident investigation team traveled to the mine, conducted a physical inspection of the accident site, interviewed employees, and reviewed conditions and work procedures relevant to the accident. MSHA conducted the investigation with the assistance of mine management, employees, and miners’ representatives.

**DISCUSSION**

**Location of the Accident**
The accident occurred on the south side of crane bay building No.19. A front-end loader travels in the immediate area where the accident occurred multiple times per shift to feed material in two separate hoppers. Persons travel on foot between the No.1 mill building and the plant office building No.21 on a daily basis. At the time of the accident, the area was dry and level with no hazardous travel conditions.

**Weather**
The weather on the day of the accident consisted of clear skies with a temperature of 84 degrees Fahrenheit. Sunset was at 8:24 p.m. Neither the weather conditions nor lighting factored into the cause of the accident.

**Front-end Loader**
The front-end loader involved in the accident is a Hyundai model HL770-7A delivered to the mine on May 24, 2012. The machine is a used rental unit. The articulated machine is equipped with four Hancook 26.5 by 25 tires, with a mid-axle height of 34 inches. It has an operating weight of 50,986 pounds. The front-end loader is 28.3 feet long and has a turning radius of 46 feet, 2 inches. Investigators inspected the front-end loader and found no safety defects.
When the front-end loader struck the victim, investigators determined the bucket of the loader was in a raised position (approximately 4 feet off the ground). This configuration reduced the visibility of the operator of the front-end loader. The front-end loader, traveling with the bucket in this raised position, created a blind spot of approximately 20 feet in front of the machine.

**Training and Experience**
Michael T. Corbett (victim) had 13 years and 8 weeks of experience, all at this mine. A representative of MSHA’s Educational Field Services conducted an in-depth review of the mine operator’s training records determining the training records, for the victim, were in compliance with MSHA’s regulations.

Walter J. Winchell, Front-end Loader Operator, received task training for operating a front-end loader on December 31, 2007. The front-end loader involved in the accident was delivered to the mine on May 24, 2012; however, Winchell did not receive task training for this specific front-end loader. A non-contributory citation was issued for a violation of 30 CFR 46.7(c).

**ROOT CAUSE ANALYSIS**

Investigators conducted a root cause analysis to identify the underlying cause of the accident. MSHA identified the following root cause and the corresponding corrective action implemented to prevent a recurrence of the accident.

ROOT CAUSE: Management policies and procedures failed to ensure the operator of the front-end loader maintained control of loader at all times while the loader was in operation, specifically while making a left hand turn when the victim was walking nearby.

CORRECTIVE ACTION: Management established safe operating procedures for mobile equipment operators when operating mobile equipment in close proximity to both pedestrians and other vehicles. All mobile equipment operators were instructed in these safe operating procedures.

**CONCLUSION**

The accident occurred due to management’s failure to ensure the operator of the front-end loader maintained control of the loader at all times, specifically while making a left hand turn when the victim was walking nearby.
ENFORCEMENT ACTIONS

Issued to Glens Falls Plant

Order No. 8705908 – Issued on May 29, 2012, under the provisions of Section 103(j) of the Mine Act:

The mine has experienced a fatal accident on the South Side of the Gypsum Feed Building (Crane Bay). This order is to ensure the safety of any person in the mine until an examination or investigation is made to determine that the south side of the Gypsum Feed Building (Crane Bay) is safe. Only those persons selected from the company officials, state officials, the miners’ representative and other persons who are deemed by MSHA to have information relevant to the investigation may enter or remain in the affected area.

The order was subsequently modified to Section 103(k) after an Authorized Representative arrived at the mine. MSHA terminated this order on May 30, 2012, after conditions that contributed to the accident no longer existed.

Citation No. 8705146 - Issued on July 2, 2012, under the provisions of 104(a) of the Mine Act for a violation of 30 CFR 56.9101:

A fatal accident occurred at this operation on May 28, 2012, when a shift operator, who was walking between two buildings, was struck by a front-end loader. The operator failed to maintain control of the front-end loader while it was in motion and struck the victim, who was walking in the area.

This citation is a “Rules to Live By” priority standard.

Approved by,

Donald J. Foster
District Manager

Date: 9-26-2012
List of Appendices

Appendix A - List of Persons Participating in the Investigation

Appendix B - Sketch of Accident Scene

Appendix C - Victim Data Sheet
Appendix A

Persons Participating in the Investigation

Glens Falls Plant

Christoph Striecher…………………………………….Vice-President of Operations
Stuart Guinther………………………………………Plant Manager
Alan Washburn……………………………………….Safety Manager
Darren Van Etten…………………………………….Miners’ Representative
Tony DelSignore…………………………………….Miners’ Representative
Michael Bernardi…………………………………… North Region Safety Manager
Charlie Klotz…………………………………………...Safety Manager

Law Office of Ogletree Deakins…………………………Margaret Lopez

Glens Falls Police Department

Seth French……………………………………………Detective-Sergeant
Peter Casertino…………………………………………Detective-Sergeant

Mine Safety and Health Administration

Gary Merwine………………………………………Mine Safety and Health Inspector
Terry Heim……………………………………………Mine Safety and Health Inspector
Walter Morgan…………………………………….Mine Safety and Health Specialist
Appendix B
# Appendix C

## Accident Investigation Data - Victim Information

### U.S. Department of Labor

**Mine Safety and Health Administration**

<table>
<thead>
<tr>
<th>Event Number</th>
<th>6 6 2 1 3 0 8</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Victim Information</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Name of Injured/ILL Employee:</strong></td>
<td>Michael T. Cochran</td>
</tr>
<tr>
<td><strong>Sex:</strong></td>
<td>M</td>
</tr>
<tr>
<td><strong>Victim's Age:</strong></td>
<td>51</td>
</tr>
<tr>
<td><strong>Degree of Injury:</strong></td>
<td>01 Fatal</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date/Time of Death</th>
<th>05/28/2012</th>
<th>21:50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date and Time Started</td>
<td>05/29/2012</td>
<td>20:30</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Regular Job Title</th>
<th>Utility Maint</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work Activity:</td>
<td>092 Walking to flu slab mvl</td>
</tr>
<tr>
<td>Was this work activity part of regular job?</td>
<td>Yes X No</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Experience</th>
<th>Years</th>
<th>Weeks</th>
<th>Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work Activity</td>
<td>13</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Regular Job Title</td>
<td>13</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>This</td>
<td>13</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>13</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hazard</th>
<th>New/Recently Employed Exempted Miner</th>
<th>Annual</th>
<th>Task</th>
</tr>
</thead>
<tbody>
<tr>
<td>170 Fatigue</td>
<td>Operator</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Company of Employment</th>
<th>Independent Contractor ID (if applicable)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(If different from production operator)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>On-site Emergency Medical Treatment</th>
<th>Not Applicable X First-Aid</th>
<th>CRP: X</th>
<th>EMT: X</th>
<th>Medical Professional</th>
<th>None</th>
</tr>
</thead>
</table>

| Part 50 Document Control Number (Form 7000-1) | 17 | Union Affiliation of Victim | 0000 | None (No Union Affiliation) |